

SEDATIVES AND HYPNOTICS

Sedative-hypnotic drugs **depress the CNS**.

They **reduce tension and anxiety** and induce **calmness** (sedative effect) or **sleep** (hypnotic effect).

Low doses of these drugs exert a calming effect and higher doses have a sleep-inducing effect.

CLASSIFICATION:

Barbiturates (Diureides):

Long acting Barbiturates:

- Phenobarbitone
- Mephobarbitone

Short acting Barbiturates:

- Butobarbitone
- Secobarbitone

Ultra short acting Barbiturates:

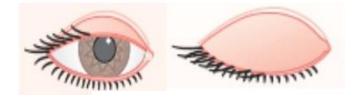
- Thiopentone
- Hexobarbitone

Benzodiazepines:

- Diazepam
- Nitrazepam
- Alprazolam

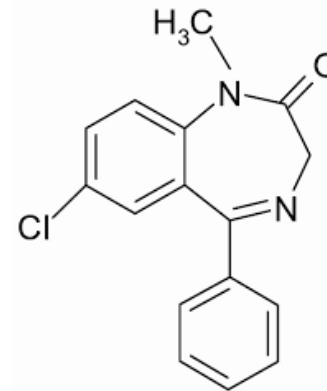


SEDATIVE



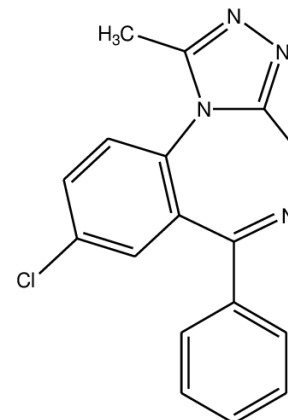
HYPNOTIC

Diazepam



**7-Chloro-1-methyl-
5-phenyl-1,3-dihydro-2H-
1,4-benzodiazepin-2-one**

Alprazolam



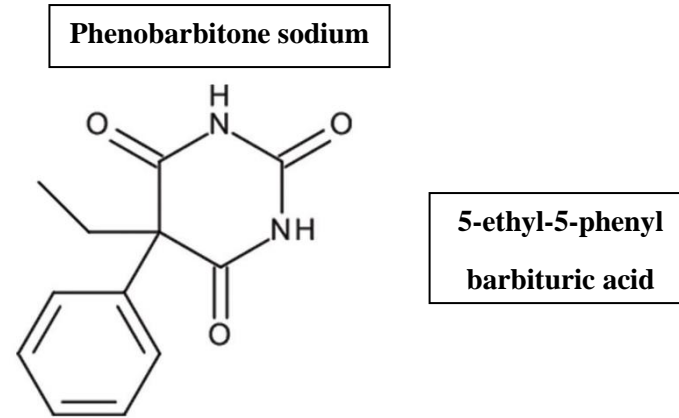
**8-Chloro-1-methyl-6-phenyl-
4H-s-triazolo [4,3- α]
[1,4] benzodiazepine**

Newer Non-Benzodiazepines Hypnotics:

- Zopiclone
- Zolpidem

Miscellaneous:

- Chloral hydrates
- Triclofos
- Paraldehyde



SEDATIVE AND HYPNOTIC

<p>Diazepam - Benzodiazepine derivative</p>	<p>Nonspecifically binds with BDZ receptors. BDZ receptors couple with GABA receptors. Enhances the effect of GABA by increasing its affinity with GABA-A receptors.</p>	<ul style="list-style-type: none"> - Severe anxiety disorders - Managing insomnia for short term sedative 	<p>4-30°C for 90 days Store in tightly closed and light resistant containers.</p>	<ul style="list-style-type: none"> ○ Tablets ○ Oral solution ○ Rectal gel ○ Injection 	<ul style="list-style-type: none"> ○ Diastat ○ Valium ○ Diastat Acugel ○ Sedanite ○ Calmpose
<p>Alprazolam - Triazolo Benzodiazepine derivative</p>	<p>Nonspecifically binds with BNZ₁ & BNZ₂ receptors. BNZ₁ & BNZ₂ receptors bind with GABA-A receptors. Enhances the effect of GABA by increasing its affinity with GABA-A receptors.</p>	<ul style="list-style-type: none"> - Managing anxiety - Panic disorders 	<p>20-25°C Store protected from light.</p>	<ul style="list-style-type: none"> ○ Tablets 	<ul style="list-style-type: none"> ○ Alprazolam ○ Intensol ○ Xanax ○ Alzolam ○ Alzopax

Nitrazepam - Benzodiazepine derivative	Inhibits GABA-A receptors Enhances GABA binding activity	- Severe anxiety - Panic disorder - Insomnia - Seizure	15-30°C Store in tightly closed and light resistant containers.	○ Tablets ○ Capsules	○ Nitrazepam ○ Nitrazadon ○ Nitravet
Phenobarbital - Barbituric acid derivative	- Binds to inhibitory GABA-A receptors - Decrease excitatory transmitter release by inhibiting Ca ²⁺ channels	- Sedative - Hypnotic	15-30°C Store in tightly closed containers.	○ Oral elixir ○ Oral tablet ○ Capsules ○ Injection	○ Luminal ○ Solfoton ○ Phenyctal